

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

FAX COPY RECEIVED

MAY - 8 2002

TECHNOLOGY CENTER 2800

## Application of

Applicants : Rhodes et al.  
Serial No. : 09/008,531  
Filed : January 16, 1998  
Title : METHOD OF MAKING A SEMICONDUCTOR DEVICE HAVING  
IMPROVED CONTACTS  
Docket No. : MIO0012V2  
Examiner : Trinh, Michael Manh  
Art Unit : 2822

CERTIFICATE OF FACSIMILE TRANSMISSION  
I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark  
Office (Fax No. 703/872-9318) on May 8, 2002.

*Julie Cope*  
Julie G. Cope Reg. No. 48,624

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

## RESPONSE TO RESTRICTION REQUIREMENT

This paper is being filed in response to the Office Action mailed on April 26, 2002. In that Action, the Examiner required restriction between allegedly separate inventions identified by the Examiner as Group I, claims 21-25, 31-32, drawn to a method of making a semiconductor device, which method including forming a layer of conductive material having a topology including a substantially vertical component, and forming a contact in the contact hole to contact the vertical component, wherein vertical component is a spacer, wherein the conductive layer is a capacitor electrode;

Group II, claims 26-30, 35-36, drawn to a method of making a semiconductor device having an improved contact to a conductive layer, which method including forming a layer of conductive material along the surfaces of the sidewalls of the openings to form a localized thick region, and forming a contact hole by etching the overlayer and an overetch amount of the conductive layer, wherein the overetch amount is an amount necessary to account for variations in the thickness of the overlayer in forming the first layer of material and the conductive layer;

Group III, claims 40-43, drawn to a method of making a semiconductor device, which method including forming a conductive layer having a thick region, and forming a contact in the overlayer and in the thick region and physically in contact with the thick

26/Electron  
3/23/02  
A. Welch

region, wherein the thick region having a width greater than other portions of the conductive layer; and

Group IV, claim 48, drawn to a method of making a semiconductor device, which method including forming a thick region of a conductive layer having a second thickness greater than a first thickness formed over an underlayer, and forming a contact in the overlayer and in an overetch amount of the thick region, wherein the overetch amount has a thickness greater than the first thickness.

Applicants hereby elect to have Group I, claims 21-25, 31-32, examined on the merits. This election is made with traverse. The Examiner states that there is no generic claim, the fields of search are not co-extensive, and separate examination would be required. However, the claims have been reviewed collectively throughout the application's lengthy prosecution. In addition, the claims are all generally related to a process for making a semiconductor device having a localized thick region in a conductive layer for making electrical contact to a conductor. Therefore, review of all of the claims in a single application would not necessitate an extensive further search nor be unduly burdensome for the Examiner. Thus, restriction of the claims is not proper.

Respectfully submitted,

KILLWORTH, GOTTMAN, HAGAN  
& SCHAEFF, L.L.P.

By Julie Cope  
Julie G. Cope  
Registration No. 48,624

One Dayton Centre  
One South Main Street, Suite 500  
Dayton, Ohio 45402-2023  
Telephone: (937) 223-2050  
Facsimile: (937) 223-0724

JGC/

FAX COPY RECEIVED

MAY - 8 2002

TECHNOLOGY CENTER 2800

**FACSIMILE COVER SHEET**

**TO: Examiner Michael Manh Trinh**  
Art Unit 2822

Company: Assistant Commissioner for Patents  
Fax No.: 703-872-9318

**FROM: Julie G. Cope**

Date: May 8, 2002

Pages: 3  
(including cover page)

Our Docket No.: MIO 0012 V2

Transmission No.: \_\_\_\_\_

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> ORIGINAL WILL NOT FOLLOW |  |
| <input type="checkbox"/> ORIGINAL WILL FOLLOW BY:            | <input type="checkbox"/> REGULAR MAIL  |
|  | <input type="checkbox"/> EXPRESS MAIL  |
|  | <input type="checkbox"/> HAND DELIVERY |

**Remarks: IF YOU HAVE ANY PROBLEMS RECEIVING THIS TELECOPY MESSAGE, PLEASE CONTACT EVELYN M. SMART AT (937) 223-2050 AS SOON AS POSSIBLE. THANK YOU.**

**U.S. APPLICATION SERIAL NO. 09/008,531**

**CONFIDENTIAL FACSIMILE COMMUNICATIONS**

The information contained in this facsimile message, and any and all accompanying documents, constitutes confidential information which is the property of Killworth, Gottman, Hagan & Schaeff. If you are not the intended recipient of this information, any disclosure, copying, distribution, or taking of any action in reliance on this information, is strictly prohibited. If you have received this facsimile message in error, please notify us immediately to make arrangements for its return to us. Thank you.



*Patents, Trademarks and Related Matters*  
**Killworth, Gottman, Hagan & Schaeff, LLP**

One Dayton Centre  
One South Main Street, Suite 500  
Dayton, Ohio 45402-2023

937.223.2050  
Fax | 937.223.0724  
E-mail | kghs@kghs.com

**FAX COPY RECEIVED**

**MAY - 8 2002**

**TECHNOLOGY CENTER 2800**